

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of driving an electronic device, with one frame period comprising n sub-frame periods SF₁, SF₂, ..., SF_n, the n sub-frame periods each comprising address (writing) periods Ta₁, Ta₂, ..., Ta_n and sustain (lights on) periods Ts₁, Ts₂, ..., Ts_n, comprising the steps of:

~~wherein the address (writing) period overlaps with the sustain (lights on) period in at least one sub-frame period of the n sub-frame periods, and~~

~~wherein, in the case where an address (writing) period Ta_m (1 ≤ m ≤ n) of a sub-frame period SF_m overlaps with an address (writing) period Ta_{m+1} of a sub-frame period SF_{m+1}, a clear period Te_m is provided which starts upon completion of a sustain (lights on) period Ts_m of the sub-frame period SF_m and ends upon start of the address (writing) period Ta_{m+1}.~~

inputting a first signal to a pixel comprising a light emitting element from a source signal line during each address period, wherein a capacitor storage line is maintained at a first potential;

turning on the light emitting element during each sustain period, wherein the capacitor storage line is maintained at the first potential;

~~(Claim 2)~~
providing a clear period Tc_m during a period from an end of the sustain period Ts_m (1 ≤ m ≤ n) of a sub-frame period SF_m through until a start of the address period Ta_{m+1} of a sub-frame period SF_{m+1}, wherein the capacitor storage line is maintained at a second potential.

2. (Currently amended) A method of driving an electronic device, with one frame period

comprising n sub-frame periods SF₁, SF₂, ..., SF_n, the n sub-frame periods each comprising address (writing) periods Ta₁, Ta₂, ..., Ta_n and sustain (lights-on) periods Ts₁, Ts₂, ..., Ts_n, comprising the steps of:

~~wherein the address (writing) period overlaps with the sustain (lights-on) period in at least one sub-frame period of the n sub-frame periods, and~~

~~wherein, in the case where an address (writing) period Ta_n of a j-th (0 < j) frame sub-frame period SF_n overlaps with an address (writing) period Ta₁ of a (j+1)-th frame sub-frame period SF₁, a clear period Tc_n is provided which starts upon completion of a sustain (lights-on) period Ts_n of the j-th frame sub-frame period SF_n and ends upon start of the address (writing) period Ta₁ of the (j+1)-th frame sub-frame period SF₁.~~

inputting a first signal to a pixel comprising a light emitting element from a source signal line during an address period Ta_n of a j-th (0 < j) frame sub-frame period SF_n, wherein a capacitor storage line is maintained at a first potential;

turning on the light emitting element during a sustain period Ts_n of a j-th (0 < j) frame sub-frame period SF_n, wherein a capacitor storage line is maintained at a first potential;

providing a clear period Tc_n during a period from an end of the sustain period Ts_n through until a start of the address period Ta₁ of a (j+1)-th period frame sub-frame period SF₁, wherein the capacitor storage line is maintained at a second potential.

3. (Currently amended) A method of driving an electronic device, with one frame period comprising n sub-frame periods SF₁, SF₂, ..., SF_n, the n sub-frame periods each comprising address (writing) periods Ta₁, Ta₂, ..., Ta_n and sustain (lights-on) periods Ts₁, Ts₂, ..., Ts_n,

wherein, in a certain sub-frame period SF_k ($1 \leq k \leq n$), when the length of its address (writing) period is given as t_{ak} , the length of its sustain (lights up) period as t_{sk} , and the length of one gate signal line selecting period as t_g ($t_{ak}, t_{sk}, t_g > 0$), and $t_{ak} > t_{sk}$ is satisfied, the length of SF_k 's clear period given as T_{ck} ($T_{ck} > 0$) always satisfies the following expression:

$$t_{ck} \geq t_{ak} - (t_{sk} + t_g).$$

4. (Original) A method of driving an electronic device as claimed in claim 1, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

5. (Original) A method of driving an electronic device as claimed in claim 2, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

6. (Original) A method of driving an electronic device as claimed in claim 3, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

7. (Original) A method of driving an electronic device as claimed in claim 1, wherein an EL element does not emit light during the clear period irrespective of an image signal.

8. (Original) A method of driving an electronic device as claimed in claim 2, wherein an EL element does not emit light during the clear period irrespective of an image signal.

9. (Original) A method of driving an electronic device as claimed in claim 3, wherein an EL element does not emit light during the clear period irrespective of an image signal.

10. (Currently amended) An electronic device comprising a source signal line side driver circuit, a gate signal line side driver circuit, a capacitor storage line driving circuit, and a pixel portion, wherein:

the pixel portion has a plurality of source signal lines, a plurality of gate signal lines, a plurality of current supply lines, a plurality of capacitor storage lines, and a plurality of pixels;

each of the plurality of pixels has a switching transistor, an EL driving transistor, a capacitor storage, and an EL element;

the switching transistor has a gate electrode electrically connected to the gate signal line;

the switching transistor has a source region and a drain region one of which is electrically connected to the source signal line and the other of which is electrically connected to a gate electrode of the EL driving transistor;

the capacitor storage has an electrode electrically connected to the capacitor storage line and has another electrode electrically connected to the gate electrode of the EL driving transistor; and

the EL driving transistor has a source region and a drain region one of which is electrically connected to the current supply line and the other of which is electrically connected to one electrode of the EL element; and

a potential of the capacitor storage line changes in accordance with a signal inputted from

the capacitor storage line driver circuit.

11. (Original) An electronic device as claimed in claim 10, wherein the capacitor storage line is electrically connected to the capacitor storage line driving circuit so that a signal having amplitude is inputted to the capacitor storage line from the capacitor storage line driving circuit.

12. (Currently amended) An electronic device operated by a driving method in which:
one frame period comprises n sub-frame periods $\langle SF_1, SF_2, \dots, SF_n \rangle$
the n sub-frame periods each comprises address (writing) periods $\langle Ta_1, Ta_2, \dots, Ta_n \rangle$ and
sustain (lights-on) periods $\langle Ts_1, Ts_2, \dots, Ts_n \rangle$
~~the address (writing) period overlaps with the sustain (lights-on) period in at least one sub frame period of the n sub frame periods; and,~~

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in the case where an address (writing) period Ta_m ($1 \leq m \leq n$) of a sub-frame period SF_m overlaps with an address (writing) period Ta_{m+1} of a sub-frame period SF_{m+1} , a clear period Tc_m is provided which starts upon completion of a sustain (lights-on) period Ts_m of the sub-frame period SF_m and ends upon start of the address (writing) period Ta_{m+1} .

inputting a first signal to a pixel comprising a light emitting element from a source signal line during each address period, wherein a capacitor storage line is maintained at a first potential;

turning on the light emitting element during each sustain period, wherein the capacitor storage line is maintained at the first potential;

providing a clear period (Tc_m) during a period from an end of the sustain period Ts_m ($1 \leq m \leq n$) of a sub-frame period SF_m through until a start of the address period Ta_{m+1} of a sub-frame period SF_{m+1} , wherein the capacitor storage line is maintained at a second potential.

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13. (Currently amended) An electronic device operated by a driving method in which:

one frame period comprises n sub-frame periods SF₁, SF₂, ..., SF_n;

the n sub-frame periods each comprises address (writing) periods Ta₁, Ta₂, ..., Ta_n and sustain (lights-on) periods Ts₁, Ts₂, ..., Ts_n;

~~the address (writing) period overlaps with the sustain (lights on) period in at least one sub frame period of the n sub frame periods; and,~~

~~in the case where an address (writing) period Ta_n of a j-th (0 < j) frame sub-frame period SF_n overlaps with an address (writing) period Ta₁ of a (j+1)-th frame sub-frame period SF₁, a clear period Tc_n is provided which starts upon completion of a sustain (lights on) period Ts_n of the j-th frame sub-frame period SF_n and ends upon start of the address (writing) period Ta₁ of the (j+1)-th frame sub-frame period SF₁.~~

inputting a first signal to a pixel comprising a light emitting element from a source signal line during an address period Ta_n of a j-th (0 < j) frame sub-frame period SF_n, wherein a capacitor storage line is maintained at a first potential;

turning on the light emitting element during a sustain period Ts_n of a j-th (0 < j) frame sub-frame period SF_n, wherein a capacitor storage line is maintained at a first potential;

providing a clear period Tc_n during a period from an end of the sustain period Ts_n through until a start of the address period Ta₁ of a (j+1)-th period frame sub-frame period SF₁, wherein the capacitor storage line is maintained at a second potential.

14. (Currently amended) An electronic device wherein:

one frame period comprises n sub-frame periods SF₁, SF₂, ..., SF_n;

the n sub-frame periods each comprises address (writing) periods $T_{a1}, T_{a2}, \dots, T_{an}$ and sustain (lights-on) periods $T_{s1}, T_{s2}, \dots, T_{sn}$; and,

in a certain sub-frame period SF_k ($1 \leq k \leq n$), when the length of its address (writing) period is given as t_{ak} , the length of its sustain (lights-up) period as t_{sk} , and the length of one gate signal line selecting period as t_g ($t_{ak}, t_{sk}, t_g > 0$), and $t_{ak} > t_{sk}$ is satisfied, the length of SF_k 's clear period given as T_{ck} ($T_{ck} > 0$) always satisfies the following expression:

$$t_{ck} \geq t_{ak} - (t_{sk} + t_g).$$

15. (Original) An electronic device as claimed in claim 12, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

16. (Original) An electronic device as claimed in claim 13, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

17. (Original) An electronic device as claimed in claim 14, wherein a clear signal inputted during the clear period is provided by increasing or lowering the electric potential of a capacitor storage line by means of a signal inputted from a capacitor storage line driving circuit.

18. (Original) An electronic device as claimed in claim 12, wherein an EL element does not emit light during the clear period irrespective of an image signal.

19. (Original) An electronic device as claimed in claim 13, wherein an EL element does not emit light during the clear period irrespective of an image signal.

20. (Original) An electronic device as claimed in claim 14, wherein an EL element does not emit light during the clear period irrespective of an image signal.

21. (Original) A method of driving a electronic device according to claim 1, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

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22. (Original) A method of driving a electronic device according to claim 2, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

23. (Original) A method of driving a electronic device according to claim 3, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

24. (Original) An electronic device according to claim 10, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount

display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

25. (Original) An electronic device according to claim 12, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

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26. (Original) An electronic device according to claim 13, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.

27. (Original) An electronic device according to claim 14, wherein said electronic device is a device selected from the group consisting of: an EL display, a video camera, a head-mount display, a DVD player, a personal computer, a cellular phone and an audio system for automobiles.
